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10/625,876	07/24/2003	Thomas Richard Beard		9673

7590 09/07/2007  
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EXAMINER
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BARTLEY, KENNETH

ART UNIT	PAPER NUMBER
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3693

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09/07/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/625,876	<b>Applicant(s)</b> BEARD ET AL.	
	<b>Examiner</b> Kenneth L. Bartley	<b>Art Unit</b> 3693	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

1. Claims 1-44 have been examined.

#### ***Priority***

2. Applicant is advised of possible benefits under 35 U.S.C. 119(a)-(d), wherein an application for patent filed in the United States may be entitled to the benefit of the filing date of a prior application filed in a foreign country.

The Examiner noted the foreign reference in Applicant's submittal, but did not see any claim to priority in the specification or the oath/declaration.

#### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-4, 6-12, 14-20, 22-26, 28-34, 36-42 and 44 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 7,228,289 to Brumfield et al..

**[Note that the analysis for the system claims (1-8, 17-22, and 29-36) also applies to the respective method claims (9-16, 23-28, 37-44). For claim analysis purposes, the method claims will be analyzed.]**

Regarding claims 1 and 9 (method claim 9 reviewed see note above)

9. A method of visualising trading data comprising the steps of:

**Brumfield et al. discloses...**

**The ability to visualize trading data...**

**"As described with reference to the accompanying Figures, the preferred embodiments provide a display and/or trading method to ensure fast and accurate order entry by displaying market information along a static axis." (col. 3, lines 45-48)**

maintaining in computer memory a transaction database of transaction data representing offers for sale, offers to buy and concluded sales in relation to one or more tradable items, the transaction data comprising one or more data sets, one or more of the data sets comprising an item identifier, a transaction identifier and an item volume value;

**Brumfield et al. continues with a computer system (Fig. 1 and Fig. 2) that maintains information such as transaction data, offers, and sales including concluded sales (Fig. 4, refs. 420, 405, and 408) in relation to tradable data, that includes identifier and volume data...**

**"According to the preferred embodiment, client device 200 has trading application 202 stored in memory that when executed arranges and displays market information 108 in many particular ways, usually depending on how the trader prefers to view the information. Preferably, trading application 202 has access to market information 108 through API 204 (or application programming interface) and trading application 202 can also forward transaction information 114 to host exchange 210 via API 204." (col. 6, lines 47-56)**

retrieving transaction data from the transaction database; and

**The ability to retrieve transaction data...**

**"Electronic trading is generally based on a host exchange, one or more computer networks, and client devices. In general, the host exchange includes one or more centralized computers to form the electronic heart. Its operations typically include order matching, maintaining order books and positions, price information, and managing and updating a database that records such information." (col. 1, lines 53-59)**

displaying one or more graphical representations of some or all of the transaction data including at least one offer for sale or offer to buy, the size of one or more of the

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graphical representations proportional to the volume of tradable items represented by the transaction data.

**Fig. 4 provides graphical representation of transaction data, that includes at least one offer for sale or offer to by, and proportional representation of volume.**

**“A last traded quantity region 412 indicates the last traded quantity (“LTQ”) in association with its corresponding price level. The last trade quantity region 412 may also be used to display other useful items of interest. For example, preferably region 412 can be configured to display volume by price in bar, text, or some other format (e.g., see volume bars 452 which indicate the volume traded at various price levels over set time period).” (col. 15, lines 20-28)**

Regarding claims 2-4 and 10-12:

(claim 10) A method of visualising trading data as claimed in claim 9 wherein one or more of the data sets includes a time value.

(claim 11) A method of visualising trading data as claimed in claim 10 further comprising the step of displaying one or more of the graphical representations with a colour property based on the time value in each data set.

(claim 12) A method of visualising trading data as claimed in claim 10 further comprising the step of displaying two or more graphical representations of some or all of the transaction data, the graphical representations positioned relative to the other graphical representation(s) based on the time value in each data set.

**Brumfield et al. discloses...**

**Ability to display different colors for different time periods (also Fig. 4)...**

**“Color, for example, may be used to differentiate times within the set period of time. Of course, the LTQ may alternatively be illustrated numerically and, if desired, only the most recent LTQ may be displayed instead of a series of LTQs over a set period of time.” (col. 15, lines 28-32)**

Regarding claims 6-7 and 14-5:

(claim 14) A method of visualising trading data as claimed in claim 9 wherein one or more of the data sets includes a currency value.

(claim 15) A method of visualising trading data as claimed in claim 14 further comprising the step of displaying two or more graphical representations, the graphical representations positioned relative to the other graphical representation(s) based on the currency value in each data set.

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**Brumfield et al. discloses...**

**Fig. 4, ref. 410, discloses data sets of currency value, which represents the price of the transaction (currency value) as well as volume of last traded price level (col. 15, lines 20-28).**

Regarding claims 8 and 16:

16. A method of visualising trading data as claimed in claim 9 further comprising the step of displaying two or more graphical representations, the graphical representations positioned relative to the other graphical representation(s) based on the transaction identifier in each data set.

**Brumfield et al. discloses...**

**Fig. 4 provides two or more graphical representations for visualizing trading data.**

Regarding claims 17 and 23:

23. A method of visualising trading data comprising the steps of:

**Brumfield et al. discloses...**

**The ability to visualize trading data...**

**“As described with reference to the accompanying Figures, the preferred embodiments provide a display and/or trading method to ensure fast and accurate order entry by displaying market information along a static axis.” (col. 3, lines 45-48)**

maintaining in computer memory a transaction database of transaction data representing offers for sale, offers to buy and concluded sales in relation to one or more tradable items, the transaction data comprising one or more data sets, one or more of the data sets comprising an item identifier, a transaction identifier and an item volume value;

**Brumfield et al. continues with a computer system (Fig. 1 and Fig. 2) that maintains information such as transaction data, offers and sales in relation to tradable data, that would include identifier and volume data...**

**“According to the preferred embodiment, client device 200 has trading application 202 stored in memory that when executed arranges and displays market information 108 in many particular ways, usually depending on how the trader prefers to view the information. Preferably, trading application 202 has access to market information 108 through API 204 (or application programming interface) and trading application 202 can also forward transaction information 114 to host exchange 210 via API 204.” (col. 6, lines 47-56)**

retrieving transaction data from the transaction database; and

**“Electronic trading is generally based on a host exchange, one or more computer networks, and client devices. In general, the host exchange**

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**includes one or more centralized computers to form the electronic heart. Its operations typically include order matching, maintaining order books and positions, price information, and managing and updating a database that records such information.” (col. 1, lines 53-59)**

displaying one or more graphical representations of some or all of the transaction data including at least one offer for sale or offer to buy, the size of one or more of the graphical representations proportional to the volume of tradable items represented by the transaction data.

**Fig. 4 provides graphical representation of transaction data, that includes at least one offer for sale or offer to buy, and proportional representation of volume.**

**“A last traded quantity region 412 indicates the last traded quantity (“LTQ”) in association with its corresponding price level. The last trade quantity region 412 may also be used to display other useful items of interest. For example, preferably region 412 can be configured to display volume by price in bar, text, or some other format (e.g., see volume bars 452 which indicate the volume traded at various price levels over set time period).” (col. 15, lines 20-28)**

Regarding claims 18-20 and 24-26:

24. A method of visualising trading data as claimed in claim 23 wherein one or more of the data sets includes a time value and/or a currency value.

25. A method of visualising trading data as claimed in claim 23 further comprising the step of displaying one or more of the graphical representations with a colour property based on the time value and/or currency value in each data set.

26. A method of visualising trading data as claimed in claim 24 further comprising the step of displaying two or more graphical representations of some or all of the transaction data, the graphical representations positioned relative to the other graphical representation(s) based on the time value and/or currency value in each data set.

**Brumfield et al. discloses...**

**Ability to display different colors for different time periods...**

**“Color, for example, may be used to differentiate times within the set period of time. Of course, the LTQ may alternatively be illustrated numerically and, if desired, only the most recent LTQ may be displayed instead of a series of LTQs over a set period of time.” (col. 15, lines 28-32)**

Regarding claims 22 and 28:

28. A method of visualising trading data as claimed in claim 23 further comprising the step of displaying two or more graphical representations, the graphical representations

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positioned relative to the other graphical representation(s) based on the transaction identifier in each data set.

**Brumfield et al. discloses...**

**Fig. 4 provides two or more graphical representations for visualizing trading data.**

Regarding claims 29 and 37:

37. A method of visualising trading data comprising the steps of:

**Brumfield et al. discloses...**

**The ability to visualize trading data...**

**“As described with reference to the accompanying Figures, the preferred embodiments provide a display and/or trading method to ensure fast and accurate order entry by displaying market information along a static axis.” (col. 3, lines 45-48)**

maintaining in computer memory a transaction database of transaction data representing offers for sale, offers to buy and concluded sales in relation to one or more tradable items, the transaction data comprising one or more data sets, one or more of the data sets comprising an item identifier, a transaction identifier and an item volume value;

**Brumfield et al. continues with a computer system (Fig. 1 and Fig. 2) that maintains information such as transaction data, offers and sales in relation to tradable data, that would include identifier and volume data...**

**“According to the preferred embodiment, client device 200 has trading application 202 stored in memory that when executed arranges and displays market information 108 in many particular ways, usually depending on how the trader prefers to view the information. Preferably, trading application 202 has access to market information 108 through API 204 (or application programming interface) and trading application 202 can also forward transaction information 114 to host exchange 210 via API 204.” (col. 6, lines 47-56)**

retrieving transaction data from the transaction database; and

**“Electronic trading is generally based on a host exchange, one or more computer networks, and client devices. In general, the host exchange includes one or more centralized computers to form the electronic heart. Its operations typically include order matching, maintaining order books and positions, price information, and managing and updating a database that records such information.” (col. 1, lines 53-59)**

displaying one or more graphical representations of some or all of the transaction data including at least one offer for sale or offer to buy, the size of one or more of the



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graphical representations proportional to the volume of tradable items represented by the transaction data.

**Fig. 4 provides graphical representation of transaction data, that includes at least one offer for sale or offer to by, and proportional representation of volume.**

**“A last traded quantity region 412 indicates the last traded quantity (“LTQ”) in association with its corresponding price level. The last trade quantity region 412 may also be used to display other useful items of interest. For example, preferably region 412 can be configured to display volume by price in bar, text, or some other format (e.g., see volume bars 452 which indicate the volume traded at various price levels over set time period).” (col. 15, lines 20-28)**

Regarding claims 30-32 and 38-40:

(claim 38) A method of visualising trading data as claimed in claim 37 wherein one or more of the data sets includes a time value.

(claim 39) A method of visualising trading data as claimed in claim 38 further comprising the step of displaying one or more of the graphical representations with a colour property based on the time value in each data set.

(claim 40) A method of visualising trading data as claimed in claim 38 further comprising the step of displaying two or more graphical representations of some or all of the transaction data, each graphical representation positioned relative to the other graphical representation(s) based on the time value in each data set.

**Brumfield et al. discloses...**

**Ability to display different colors for different time periods (also Fig. 4)...**

**“Color, for example, may be used to differentiate times within the set period of time. Of course, the LTQ may alternatively be illustrated numerically and, if desired, only the most recent LTQ may be displayed instead of a series of LTQs over a set period of time.” (col. 15, lines 28-32)**

Regarding claims 33-34 and 41-42:

41. A method of visualising trading data as claimed in claim 37 wherein one or more of the data sets includes a currency value.

42. A method of visualising trading data as claimed in claim 41 further comprising the step of displaying two or more graphical representations, the graphical representations positioned relative to the other graphical representation(s) based on the currency value in each data set.

**Brumfield et al. discloses...**

**Fig. 4, ref. 410, discloses data sets of currency value, which represents the price of the transaction.**

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Regarding claims 36 and 44:

44. A method of visualising trading data as claimed in claim 37 further comprising the step of displaying two or more graphical representations, the graphical representations positioned relative to the other graphical representation(s) based on the transaction identifier in each data set.

**Brumfield et al. discloses...**

**Fig. 4 provides two or more graphical representations for visualizing trading data.**

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 5, 13, 21, 27, 35, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 7,228,289 to Brumfield et al. in view of U.S. Patent 7,243,083 to Burns et al..

Regarding claims 5 and 13:

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13. A method of visualising trading data as claimed in claim 9 further comprising the step of displaying one or more graphical representations with a colour property based on the transaction identifier in each data set.

**While Brumfield et al., in the business of displaying market information, discloses colors for different times, they do not disclose using color for different types of transactions,**

**Burns et al., in the same business of displaying market information, discloses:**

**“In FIG. 10, the bids are shown in one color while the asks/offers are shown in another color.” (col. 18, lines 29-30)**

**Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to allow for using different colors associated with transactions, motivated by Burns et al., and that doing so would help in visually identifying different types of transactions.**

Regarding claims 21 and 27:

27. A method of visualising trading data as claimed in claim 23 further comprising the step of displaying one or more graphical representations with a colour property based on the transaction identifier in each data set.

**While Brumfield et al., in the business of displaying market information, discloses colors for different times, they do not disclose using color for different types of transactions,**

**Burns et al., in the same business of displaying market information, discloses:**

**“In FIG. 10, the bids are shown in one color while the asks/offers are shown in another color.” (col. 18, lines 29-30)**

**Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to allow for using different colors associated with transactions, motivated by Burns et al., and that doing so would help in visually identifying different types of transactions.**

Regarding claims 35 and 43:

43. A method of visualising trading data as claimed in claim 37 further comprising the step of displaying one or more of the graphical representations with a colour property based on the transaction identifier in each data set.

**While Brumfield et al., in the business of displaying market information, discloses colors for different times, they do not disclose using color for different types of transactions,**

**Burns et al., in the same business of displaying market information, discloses:**

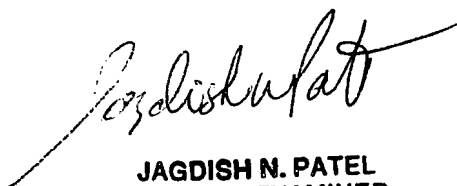
**“In FIG. 10, the bids are shown in one color while the asks/offers are shown in another color.” (col. 18, lines 29-30)**

**Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to allow for using different colors associated with transactions, motivated by Burns et al., and that doing so would help in visually identifying different types of transactions.**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth L. Bartley whose telephone number is (571) 272-5230. The examiner can normally be reached on Monday through Friday, 8:00 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jagdish Patel can be reached on (571) 272-6748. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



**JAGDISH N. PATEL**  
PRIMARY EXAMINER